

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/002519 A3

(51) International Patent Classification⁷: **A61K 31/4425**,
C07D 213/20, 213/30

(21) International Application Number:
PCT/US2004/020718

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/482,764 27 June 2003 (27.06.2003) US

(71) Applicant (for all designated States except US): **HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE, INC.** [US/US]; 1401 Rockville Pike, Suite 600, Rockville, MD 20852 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **POLLARD, Harvey** [US/US]; 11008 Lamplighter Lane, Potomac, MD 20854 (US). **JACOBSON, Kenneth** [US/US]; 11218 Watermill Lane, Silver Spring, MD 20902 (US).

(74) Agents: **KELBER, Steven, B.** et al.; 1200 Nineteenth Street, N.W., Washington, DC 20036 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
1 September 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AMPHIPHILIC PYRIDINIUM COMPOUNDS, METHOD OF MAKING AND USE THEREOF

(57) Abstract: The present invention is directed to the amphiphilic pyridinium compounds, such as for suppressing IL-8 secretion and production. The present invention further provides methods of making and using such compounds for the treatment of the IL-8 related diseases, such as cystic fibrosis.

WO 2005/002519 A3